

1    **WHAT IS CLAIMED IS:**

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3            1.    A method for treating a target tissue within an intervertebral  
4 disc, comprising:

5                a) forming a void in at least close proximity to the target tissue; and  
6                b) delivering a preheated fluid to the void, wherein the fluid is  
7 preheated to a temperature in the range of from about 45°C to 90°C, and at least a  
8 portion of the target tissue undergoes contraction due to heat exchange between the  
9 target tissue and the fluid.

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1            2.    The method of claim 1, wherein the temperature of the target  
2 tissue is increased to a treatment temperature due to the heat exchange between the  
3 target tissue and the preheated fluid, wherein the treatment temperature is in the range  
4 of from about 45°C to 90°C.

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1            3.    The method of claim 2, wherein the treatment temperature is in  
2 the range of from about 60°C to 70°C.

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1            4.    The method of claim 1, wherein the target tissue comprises  
2 nucleus pulposus tissue.

3

1            5.    The method of claim 1, wherein the target tissue lies adjacent to  
2 the annulus fibrosus.

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1            6.    The method of claim 1, wherein the target tissue lies adjacent to  
2 an annular fissure of the disc.

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1            7.    The method of claim 1, wherein said step a) comprises ablating  
2 disc tissue components using an electrosurgical probe.

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1            8.    The method of claim 7, further comprising:  
2                c) prior to said step b), manipulating the electrosurgical probe such that  
3 the void is sculpted to a suitable size and shape.

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1           9.       The method of claim 7, wherein said step b) comprises  
2       delivering the preheated fluid to the void via a fluid delivery unit, wherein the fluid  
3       delivery unit is integral with the electrosurgical probe.

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1           10.      The method of claim 7, wherein said step b) comprises  
2       delivering the preheated fluid to the void via a fluid delivery system, wherein the fluid  
3       delivery system is separate from the electrosurgical probe.

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1           11.      The method of claim 1, wherein said step b) comprises  
2       delivering saline to the void, the saline at a temperature in the range of from about  
3       60°C to 70°C.

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1           12.      The method of claim 1, wherein said step b) comprises  
2       delivering the preheated fluid to the void at a regulated rate, and the method further  
3       comprises:

4           d) withdrawing the fluid from the void, whereby the fluid is circulated  
5       through the void at a substantially constant temperature.

6

1           13.      A method for treating an intervertebral disc, comprising:  
2           a) forming a void in at least close proximity to a target tissue within the  
3       intervertebral disc; and  
4           b) delivering a preheated fluid to the void, wherein at least a portion of  
5       the target tissue is heated to a temperature in the range of from about 45°C to 90°C,  
6       whereby collagen fibers within the target tissue undergo shrinkage.

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1           14.      The method of claim 13, wherein at least a portion of the target  
2       tissue is heated to a temperature in the range of from about 60°C to 70°C.

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1           15.      The method of claim 13, wherein the target tissue is heated via  
2       heat exchange between the preheated fluid and the target tissue.

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1           16.      The method of claim 13, wherein said step a) comprises  
2       forming a void in the nucleus pulposus.

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1           17.    The method of claim 13, wherein said step a) comprises:  
2            c) positioning an active electrode terminal of an electrosurgical probe  
3    within the disc at a location in at least close proximity to the target tissue; and  
4            d) applying a high frequency voltage between the active electrode  
5    terminal and a return electrode.

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1           18.    The method of claim 17, further comprising:  
2            e) during said step d), manipulating the electrosurgical probe such that  
3    the void is sculpted to a suitable size and shape.

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1           19.    The method of claim 17, wherein said step b) comprises  
2    delivering the preheated fluid to the void via a fluid delivery system, the fluid delivery  
3    system separate from the electrosurgical probe.

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1           20.    An electrosurgical apparatus, comprising:  
2            a shaft having a shaft distal end;  
3            an electrode assembly at the shaft distal end;  
4            a fluid delivery unit including a fluid delivery tube; and  
5            a fluid source unit coupled to the fluid delivery tube, the fluid source unit  
6    providing a fluid at a controlled temperature to the fluid delivery unit, wherein the fluid  
7    source unit includes a fluid reservoir and a temperature control unit coupled to the fluid  
8    reservoir.